



3736

Att. Dkt. No.: REG 334-A-US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Serial No.: 10/009,620 Group: 3736
Filing Date: December 11, 2001 Examiner: Unknown
Title: Method of Imaging and Targeting Tumor Vasculature

FIRST CLASS MAIL CERTIFICATE

I hereby certify that this document is being deposited with the United States Postal Service on this date as first class mail addressed to: Commissioner for Patents, United States Patent and Trademark Office, Washington, D.C. 20231.

Bernadette B. Fahey
Bernadette B. Fahey

February 6, 2003
Date

RECEIVED**INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR §§ 1.56 and 1.97****FEB 20 2003**

Assistant Comm. Patent and Trademarks
Washington, D.C. 20231

TECHNOLOGY CENTER R3700

Dear Sir:

In compliance with the applicant's duty to submit information material to patentability of the above-referenced case, Applicants herein submit the following Information Disclosure Statement with the accompanying PTO Form 1449 and copies of references listed therein. The PTO is kindly requested to make of record those references which may be pertinent to the examination of the above-referenced application.

Applicants wishes to point out that Foreign Document WO/00 18439 is in German. A translation of this document will be provided as soon as it is available. Please note that the abstract of this document is in English.

This Information Disclosure Statement is being filed:

- ☒ (b) Within three months of the filing date of the above referenced application; within three months of the entry of an international application into the national phase; before the mailing date of a first Office action on the merits; or before the mailing of a first Office action after the filing of a request for continued examination under § 1.114. Accordingly, no fee is required for the submission.

or

- ☐ (c) After (b) above, but before the mailing date of any of a final action under § 1.113, a notice of allowance under § 1.311, or any action that otherwise closes prosecution in the application. Accordingly, the undersigned certifies as follows:

- ☐ (e)(1) Each item of information contained in this IDS was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the date of the filing of this IDS; or
- ☐ (e)(2) No item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and to the knowledge of the person signing the certification after making reasonably inquiry, no item of information contained in the IDS was known to any individual designated in § 1.56(c) more than three months prior to the filing of this IDS;

or

- ☐ This IDS is accompanied by the fee set forth in 37 CFR § 1.17(p);

or

- ☐ (d) After (c) above, but on or before payment of the issue fee and the undersigned certifies as follows:
- ☐ (e)(1) Each item of information contained in this IDS was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the date of the filing of this IDS; or

- ☐ (e)(2) No item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and to the knowledge of the person signing the certification after making reasonably inquiry, no item of information contain in the IDS was known to any individual designated in § 1.56(c) more than three months prior to the filing of this IDS;

and

- ☐ This IDS is accompanied by the fee set forth in 37 CFR § 1.17(p).

REQUEST FOR TRANSFER OF REFERENCE COPIES

- ☐ Applicants respectfully request that the cited references filed in the Information Disclosure Statement submitted in connection with parent application USSN _____, filed _____, be transferred to the subject application for consideration by the Examiner

Fees

The fee required for the filing of this Information Disclosure Statement is estimated to be \$ _____. Applicants hereby authorize such charge to Deposit Account number 18-0650. If any additional fee should be deemed necessary, the Commissioner is hereby authorized to charge Deposit Account Number 18-050.

Respectfully submitted



Linda O. Palladino

Reg. No. 45,636

Regeneron Pharmaceuticals, Inc.

777 Old Saw Mill River Road

Tarrytown, New York 10591

(914) 345-7400



FORM PTO-1449

Att. Docket No.: REG 334-A-US

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

USSN : 10/009,620

Applicant: Wiegand, S. J.

Date Filed: December 11, 2001

Title: Methods of Imaging and Targeting
Tumor Vasculature

Examiner: Not yet known

Group Art Unit: 3736

February 6, 2003

RECEIVED**FEB 20 2003**

U.S. PATENT DOCUMENTS

TECHNOLOGY CENTER R3700

<u>Examiner Initials</u>	<u>Patent Number</u>	<u>Issue Date</u>	<u>Publication Number</u>	<u>Publication Date</u>	<u>Name</u>
------------------------------	--------------------------	-----------------------	-------------------------------	-----------------------------	-------------

FOREIGN PATENT DOCUMENTS

<u>Examiner Initials</u>	<u>Document Number</u>	<u>Date</u>	<u>Country</u>	<u>Class/ Date Subclass</u>	<u>Translation Yes No</u>
------------------------------	----------------------------	-------------	----------------	---------------------------------	-------------------------------

_____ WO/99 40947 08/19/99 PCT

_____ WO/00 18439 04/06/00 PCT

OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages, etc.)

_____ Maisonpierre, PC, et al., 1997, "Angiopoietin-2, a natural antagonist for Tie2 that disrupts in vivo angiogenesis", Science 277:55-60

_____ Kirsch, JE, 1991, "Basic principles of magnetic resonance contrast agents", Top Magn Reson Imaging 3:1-18

_____ Wallis, F. and Gilbert, FJ, 1999, J R, "Magnetic resonance imaging in oncology: an overview", Coll Surg Edinb 44:117-125

_____ Schiepers, C. and Hoh, CK, 1998, "Positron emission tomography as a diagnostic tool in oncology", Eur Radiol 8:1481-1494

_____ Ferrand, SK, et al., 1999, "What is new in nuclear medicine imaging?", Surg Oncol Clin N Am 8:185-204

- _____ Asahara, T. et al., 1998, "Tie2 receptor ligands, angiopoietin-1 and angiopoietin-2, modulate VEGF-induced postnatal neovascularization", *Circ Res* 83(3):233-240.
- _____ Lin, P., et al., 1998, "Anti-angiogenic gene therapy targeting the endothelium-specific receptor tyrosine kinase Tie2", *PNAS USA* 95:8829-8834.
- _____ Tanaka, S., et al., 1999, "Biologic significance of angiopoietin-2 expression in human hepatocellular carcinoma", *J Clin Invest* 103(3):341-345.
- _____ Molema, G., et al., 2000, "The use of bispecific antibodies in tumor cell and tumor vasculature directed immunotherapy", *J Control Release* 64 (1-3):229-239.
- _____ Berns, A., 1999, "Mouse model for cancer at center stage - AACR special meeting: Cancer biology and the mutant mouse: New methods, new models, new insights, Keystone, Colorado, USA 31 January - 5 February 1999", *Trends in Genetics* 15(5):177.
- _____ Lauren, J., et al., 1998, "Is angiopoietin-2 necessary for the initiation of angiogenesis?", *Am J Path* 153(5):1333-1339.
- _____ Stratmann, A., et al., 1998, "Cell type-specific of expression of angiopoietin-2 suggests a role in glioblastoma angiogenesis", *Am J Path* 153(5):1459-1466.
- _____ Wong, MP., et al., 1999, "Down-regulated angiopoietin-1 / tie2 receptor pathway and enhanced expression of vascular endothelial growth factor and angiopoietin-2 in non-small cell lung carcinoma", *Proc Am Assoc Canc Res Annual* 40:556.
- _____ Ding, H. et al., 1999, "Expression and hypoxic regulation of angiopoietins and its receptors in human astrocytoma cell lines and tumor specimens", *Proc Am Assoc Canc Res Annual* 40:556.
- _____ Chan, ASY, et al., 1999, "Angiopoietin-2 and VEGF co-express in the accelerated phase of angiogenesis during anaplastic progression of gliomas", *Proc Am Assoc Canc Res Annual* 40:414.
- _____ Fujikawa, K., et al., 1998, "Expression of angiopoietin-1, angiopoietin-2, tie-1 and tie-2 in breast cancer", *Blood* 92(10, Suppl 1, Part1-2, page 174A
- _____ Holash, J, et al., 1999, "Vessel cooption, regression, and growth in tumors mediated by angiopoietins and VEGF", *Science*, 284(5422):1994-1998.
- _____ Zagzag, D, et al., 1999, "In situ expression of angiopoietins in astrocytoma identifies angiopoietin-2 as an early marker of tumor angiogenesis", *Exp Neuro* 159(2):391-400.
- _____ Yoshida, Y., et al., 1999, "Expression of angiostatic factors in colorectal cancer", *Int J Oncol* 15(6):1221-1225.

- _____ Holash, J., et al., 1999, "New model of tumor angiogenesis: Dynamic balance between vessel regression and growth mediated by angiopoietins and VEGF", *Oncogene*, 19(38):5356-5362.
- _____ Ijland, SAJ, et al., 1999, "Expression of angiogenic and immunosuppressive factors by uveal melanoma cell lines", *Melanoma Res* 9(5):445-450.
- _____ Theis, H., et al., 1999, "Role of VEGF, angiopoietins and their receptors in angiogenesis of renal cell carcinoma", *J Am Soc Neph* 10, Program and Abstract Issue:186A.

EXAMINER
CONSIDERED

DATE

EXAMINER:

Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Respectfully submitted,

By: Linda O. Palladino

Linda O. Palladino
Reg. No. 45,636
Agent for Applicants
Regeneron Pharmaceuticals, Inc.
777 Old Saw Mill River Road
Tarrytown, New York 10591
(914) 345-7400